

XLV.—On some new or undescribed Species of Crustacea from the Samoa Islands. By EDWARD J. MIERS, Zoological Department, British Museum.

THE species of which descriptions are here given form part of a large series collected by the Rev. S. J. Whitmee, who is at present resident in the Samoa Islands, and presented by him to the Trustees of the British Museum. The collection contains in all nearly fifty species; and many of the specimens are remarkable for the beauty of their colouring and the excellence of their preservation.

Chlorodius samoensis, sp. n.

Carapace regularly arcuate in front, strongly areolated, with deep longitudinal grooves, and with a strongly marked transverse line extending across the carapace to the base of the fifth tooth on either side. Latero-anterior margins with five small, equal and equidistant teeth (the external orbital angles included); front prominent, four-toothed (the internal orbital angles excluded). Anterior legs granulous externally; wrist with two small tubercles; hand with a single small tubercle on its upper surface, close to the articulation with the wrist; mobile finger with a small tubercle at its base. Ambulatory legs short, very hairy. Colour greenish grey; fingers brown, the brown colour extends a little over the lower part of the hand.

Length $\frac{3}{8}$ inch, width $\frac{1}{2}$ inch.

Hab. Samoa Islands.

This species is closely allied to the *Chlorodius dentifrons* of Stimpson (Proc. Acad. Nat. Sci. Philad. 1858, p. 34), from Loo-Choo; but it differs in the sculpture of the anterior legs, which in *C. dentifrons* have two or three small teeth on the wrist and three or four on the hand.

Thalamita speciosa, sp. n.

Carapace transverse, covered with a uniform short close pubescence; the transverse ridges, the margins of the frontal lobes, and the teeth of the antero-lateral margins naked. Front divided into eight teeth, separated by rather deep fissures, the two median equal, truncated at the extremity; the next two on each side unequal, rounded at the extremity; the external tooth on each side very broad, with the inner margin arcuate, and separated from the next inner tooth by a very wide fissure. Latero-anterior margins with four equal teeth. Basal joint of the external antennae with a series of

two or three spines. Anterior legs rather long; arm with three or four spines on the front margin; wrist with a very long spine on its inner margin, and two or three smaller spines on its outer surface; hand with five spines on its upper surface, three on the outer and two on the inner margin; external surface granulous. Third joint of posterior legs with a strong spine at its infero-distal extremity. Colour of a rich blood-red.

Length $1\frac{5}{8}$ inch; breadth at fifth marginal tooth $2\frac{1}{4}$ inches.

Hab. Samoa Islands.

This species is distinguished by the close short pubescence, the form of the frontal lobes, and the existence of only four teeth on the antero-lateral margins. The species of the genus have normally five teeth, of which the fourth may be rudimentary. The rudimentary fourth tooth, however, according to M. Alphonse Milne-Edwards (Nouv. Arch. Mus. Hist. Nat. 1873, ix. p. 163), is occasionally absent in *Th. Savignyi*, a species with only four frontal lobes.

Leucosia Whitmeei, sp. n.

Carapace subglobose, closely punctate on the sides, narrowed and produced anteriorly. Front slightly relevate, concave above, obscurely tridentate; the median tooth very small, and not more prominent than the lateral ones. Thoracic sinus deep and well-defined, with a smooth, obscurely beaded margin, narrow at base, slightly widened anteriorly and rounded in front. Anterior legs of moderate length; upper surface of arm with an anterior and a posterior longitudinal line of tubercles, several above and below at the base, and two or three placed in an oblique series on the upper surface near the base, of the arm; wrist quite smooth; hand rather longer than broad, compressed, outer margin with a thin smooth ridge, inner with an obscurely beaded line; fingers small, meeting only at the tips. Abdomen of male narrowest between the penultimate and antepenultimate joints; the tubercle on the penultimate joint very small, acute. Colour greyish brown above, pinker on the sides and on the legs, with a semicircular line of five brown spots, two at the back of each branchial and one at the back of the cardiac region, and six white spots, three on each side of the gastric region.

Length nearly $\frac{3}{4}$ inch, greatest width $\frac{5}{8}$ inch.

Hab. Samoa Islands.

This species may be distinguished from all others with a tridentate front by the slight prominence of the median tooth, the form of the thoracic sinus, and the coloration of the carapace.

Alpheus lineifer, sp. n.

Slender. Frontal margin of carapace entire. Beak narrow, triangular, acute, arising between the bases of the eyes. Scale of the external antennæ acuminate, reaching beyond the peduncle of the inner antennæ. Anterior legs with the larger (right) hand suboblong, not contorted, margins rounded, smooth, but with a faint incised line extending longitudinally along the upper surface of the hand for about two thirds of its length, and thence backward obliquely across the outer surface; a transverse groove along the upper surface near the base of the mobile finger, and a triangular notch on the lower surface at the base of the immobile finger. Left anterior leg small, with a spine at the infero-distal extremity of the arm. Fingers of both hands hairy. Terminal segment and caudal appendages small, ciliate. Colour pale yellowish pink, hands of a deeper orange-pink; finger of larger hand black at base, white at tip.

Length $\frac{5}{8}$ inch.

Hab. Samoa Islands.

This species may be distinguished from all the others of the genus, in which the beak rises between the bases of the eyes and the front is entire, by the form and sculpture of the larger hand.

Palæmon gracilirostris, sp. n.

Carapace smooth, rounded above. Beak very slender, not reaching to the extremity of the peduncle of the inner antennæ; upper margin convex, with ten teeth, of which seven form a longitudinal series posterior to the eyes, and extending backward over more than half the carapace; lower margin with two teeth, apex bifid. Scale of the external antennæ large, reaching beyond the end of the peduncle of the internal antennæ. Second pair of legs reaching to about the end of the flagella of the internal antennæ, slender, scabrous; wrist scarcely longer than palm; fingers hairy, about as long as the palm, without teeth on the inner margins.

Length between tip of beak and end of terminal segment $2\frac{1}{2}$ inches.

Hab. Samoa Islands, Upolu.

This species may be distinguished from all the others of the genus which have the wrist shorter than the hand, by the remarkably slender rostrum, the apex of which is minutely bifid at the extremity. It appears to be nearly allied to *P. boninensis* of Stimpson (Proc. Acad. Nat. Sci. Philad. 1860, p. 41)—which has more numerous teeth on the rostrum, and the inner margins of the fingers toothed.

Gonodactylus graphurus, sp. n.*Gonodactylus graphurus*, List Crust. Brit. Mus. p. 85 (1847), sine descr.

Narrow, of uniform width throughout. Carapace oblong, anterior angles rounded. Rostral plate quadrilateral, narrowest at base; anterior margin with a long median acute spine. Terminal joint of the large prehensile legs slender, and destitute of spines; basal tubercle ovoid. Penultimate segment of the abdomen with six tubercles, usually terminating posteriorly in spines; caudal appendages ciliate; terminal segment with six marginal spines and seven tubercles on the upper surface, of which the median is the longest and the lateral decrease regularly in size. Colour dull olive-green; branchial appendages pink.

Length about $1\frac{3}{4}$ inch.

Hab. Samoa Islands, Upolu.

This species is distinguished from all its congeners by the number and relative size of the tubercles on the terminal segment of the abdomen.

XLVI.—*Description of a new Species of Trichoglossus from Fiji.* By E. L. LAYARD, Esq., F.Z.S., Consul for Fiji and Tonga.

Trichoglossus aureicinctus, Layard.

Upper parts all green, except the tip of the tail-feathers, brightest on the rump, cheeks, and forehead; body below green; a deep crimson patch extends from the base of the bill as far as, but below, the eye, down the chin and throat to the chest, where it is bordered by a golden band, the feathers between this and the green of the body being more or less scale-like in their markings: tail-feathers—three outer ones red at the base, yellow on the point, half black markings on outer webs; fourth black at base, with red spot, and yellow at point; rest black at base, yellow at point: bill and feet red; eyes dark buff; wing-feathers, inner web black, outer broadly bordered with green.

Length $6\frac{1}{2}$ inches, wing $3\frac{1}{2}$, tail $3\frac{1}{4}$, tarse 4 lines, bill 6 lines.

This species was first indicated by my son, Mr. Leopold Layard, who saw flocks of them at Taviuni in company with *Lorius solitarius*, but could not obtain one. A few were subsequently shot (I believe, on Ovalau) by some one; and one passed into my possession.